

ABSTRACT OF THE DISCLOSURE

A flat plate reflective assembly for receiving and focusing incident microwave signals having a wavelength (λ), comprising a series of adjacent reflecting surfaces, each having a separate focal points offset from one another in focal length by one
5 wavelength or a multiple of the wavelength. When an incident microwave signal strikes the reflective assembly, each reflected wave is directed to the focal point for the respective reflecting surface and is collected by the LNB. Each reflected wave arrives at the focal point for the reflecting surface in-phase with other reflected radiation. However, spatial resolution of the focal points reduces the deconstructive
10 interferences between the reflected radiation. In another embodiment, the flat plate reflective assembly is configured is configured to reflect incident radiation in-phase such that microwave signals reflected by each reflective surface arrive at a common focal point in-phase.